CITY OF Apple Valley

MEMO

Public Works

TO: Alex Sharpe, Planning and Econ Dev Specialist

FROM: Brandon S. Anderson, City Engineer

DATE: September 14, 2017

SUBJECT: Wasatch Storage Partners Facility Review
147th and JCRR

Alex,

The following are comments regarding the Wasatch Storage Partners Facility Review site plan dated August 23, 2017. Please include these items as conditions to approval.

General

- Portions of existing drainage and utility easements along Evendale way shall be vacated to accommodate the additional ROW required for the Cul-de-Sac.
    a. Cul-de-sac at Evendale way shall be constructed to City standards.
        i. Radius of Plat should be adjusted to accommodate required minimum radius and sidewalk per City of Apple Valley standards.
- A 10-foot drainage and utility easement shall be dedicated on final plat along the east side of Evendale Way including the CDS.
- All work and infrastructure within public easements or right of way shall be to City standards. A public improvement project will be required for work in Evendale Way.
- The area that includes the Storm water pond and infiltration area shall be dedicated as drainage and utility easement on the final plat or be platted as a separate Outlot and dedicated to the City.
- Drainage and Utility Easements are required for future well water main and proposed storm water facilities site location as raw water is stubbed into the site from the south at Evendale.
- Provide a narrative of how the buildings will be constructed and any impacts. The narrative shall include the following:
    a. Shoring (if applicable)
    b. Material Storage.
    c. Haul routes to and from the site.
    d. Phasing
- It should be clarified if the proposed storm water facilities as shown will be owned and maintained by applicant or dedicated to the City of Apple Valley for long term maintenance. An infiltration maintenance agreement will be required if owned and operated by the applicant.

Permits

- Provide a copy of the executed Encroachment Agreement with Magellan Pipeline for work occurring within easement area as indicated on plans.
- Provide a copy of the executed Minnesota Department of Health, Minnesota Pollution Control Agency, Met Council, Department of Labor and any other required permits.
- A right of way permit will be required for all work within public easements or right of way.
- A Natural Resource Management Permit (NRMP) will be required prior to any land disturbing activity commences.

Site

- An Access Restriction easement (document 2358858) does not need to be vacated as the document indicates that one vehicular access to Johnny Cake Ridge Road would be granted at location to be approved by City Engineer.
- The proposed driveway access to Johnny Cake Ridge Road shall be shifted to provide shared access to the property to the south as to not prevent future Outlot B from limited access in the future. A designated right turn lane along Johnny Cake Ridge Road may be required in the future for shared access to Lot 1 Block 1 and Outlot B. The turn lane would need to be designed in accordance with State Aid Standards and the location of the shared access would need to be able to accommodate at the location proposed.
- Site Plan should indicate driveway access dimensions from the north and south property lines along JCRR.
- Provide traffic impact study showing anticipated trips and distribution of traffic.
- Provide additional dimensions on site plan indicating radiuses, drive lane widths, etc…
- Provide additional drawing showing Auto turn turning movements to verify site circulation and layout requirements for planned vehicle usage to be used onsite. Please indicate (or show vehicle) stacking distances on the plan as circulation indicates potential for vehicles to back up onto public roadways at exit and entrance access' to the site. Show truck movement with Auto turn entering site to ensure emergency and service vehicles as well as Motor Homes (RV) and anticipated vehicles for site usage can maneuver directly to the front entrance without causing back-ups to public roadways.
- A commercial driveway entrance is required at all access points to public roadways per AV Plate No. STR-4 or STR-5.
- Provide pedestrian curb ramp per STR-10 at bituminous path along Johnny Cake Ridge Road access point.
- Remove existing driveway access point at NW corner along Johnny Cake Ridge Road and patch curb and gutter to match section at Johnny Cake Ridge Road.
- Continue sidewalk behind proposed Evendale Way cul-de-sac and provide connection point to existing sidewalk along west side of Evendale at Lifeworks facility as part of public improvement project.
- Provide concrete valley gutter per STR-11detail with the design of Evendale Way cul-de-sac as part of public improvement project.

Grading, Drainage and Erosion Control

- Final Grading Plans shall be reviewed and approved by City Engineer.
- Final Storm water Management Plan shall be reviewed and approved by City Engineer.
- The proposed storm water pond and infiltration basin as submitted are sized to accommodate Lot 1 Block 1 only storm water requirements.
- The applicant shall submit a copy of the General Storm Water Permit approval from the Minnesota Pollution Control Agency pursuant to Minnesota Rules 7100.1000 – 7100.1100 regarding the state NPDES Permit prior to commencement of grading activity.
- Erosion control measures shall be installed prior to beginning grading operations.
- A construction entrance shall be provided at all proposed entrances to be utilized for erosion control purposes. Construction access would only be allowed off Evendale Way or 147th Street. No Construction access will be allowed off Johnny Cake Ridge Road as indicated on C3-2.
- Street sweeping shall be performed as necessary to address material tracking from the site.
- The location and elevation of the site emergency overflow(s) (EOF) shall be identified on the plans. All critical HP and LP shall be identified along with drainage arrows.
- 2% minimum grades are required in all landscaped areas.
- Provide the overall site composite Curve Number (CN) along with the impervious % on the area tabulation
- Existing EVR-P48.5 has a normal water elevation of 973.77 and a HWL 977.6. The proposed infiltration basin does not appear to work with the existing ponding elevations.
- Lowest floor levels shall be 1.0' above the EOF.
- The proposed two-cell storm water configuration is not preferred for this site, additional analysis is requested evaluate the feasibility of a single wet sedimentation cell (modified existing cell) with infiltration benches due to proximity to future well location and that this property lies within a Drinking Water Supply Management Area (DWSMA).
- Provide cross section and detail for the proposed infiltration basin and storm water basin. Proposed elevations, soil mix, plantings, slopes, benches, buffer areas, access routes for maintenance should all be included on the plans.
- The recommended infiltration benches shall be constructed in accordance with Dakota County Low Impact Development Standards.
- Additional storm drain inlets are required on Sediment and Erosion Control Plan C3-2 for existing storm drain inlets within Evendale Way and 147th Street.

Sanitary Sewer, Water Main and Storm Sewer

- Final locations and sizes of Sanitary & Storm Sewer and Water main shall be reviewed with the final construction plans and approved by City Engineer.
- Domestic water and Fire service shall be split outside the building and the valves shall be located 1.5 times the height of the building away from the building or placed in location readily accessible per SER-6.

- The proposed FES to the infiltration area is requested to be eliminated and/or relocated so site drainage utilizes the existing 48" RCP FES that was sized for future drainage. This change would be incorporated into the recommended reconfiguration of EVR P48.5.

Landcape and Natural Resources

1. Quantities and locations of trees should be indicated on plan to show diversity of species.
2. Restoration/Landscape plan should indicate required buffers and appropriate seed mixtures for infiltration area, aquatic bench and upland areas associated with any storm water basins.
3. Landscape plan should clearly indicate drainage and utility easements and property line. No major tree plantings shall be located over any underground utilities. The Drainage and Utility Easement will require clearance around the underground utilities, or the expectation that trees may have to be removed for access when needed.
4. Provide some trees and landscaping improvements on the south frontage.
5. A large portion of this project is located in the high vulnerability DWSMA, so it is extremely important that we protect against illicit discharges to infiltration facilities. To prevent contamination of the infiltration basin:
    a. Recommend aggressive signage about dumping around the infiltration basin and catch basins and other important locations on site
    b. Have information available on site about hazardous and other waste disposal requirements
    c. Have clearly marked disposal facilities for various wastes (garbage and recycling).
6. Riprap at the flared end is not adequate pretreatment for an infiltration basin.
7. Notation should be included on the ESC plan on the infiltration basin (not just the details and narrative section) that prohibits stockpiling, vehicle traffic, materials storage, and other activities that could clog the infiltration basin.
8. A more detailed vegetation establishment plan should be established for the areas seeded with native plants (infiltration basin). The basin shall remain offline while permanent (not temporary) vegetation is being established. Guidelines within the MN DOT Seeding Manual should be followed to establish a successful native planting; p. 44 offers a good outline of what sort of maintenance regime should be followed during establishment.
9. Infiltration basin bottom is incorrectly labeled on grading plan (>100' deep). Vegetation may not successfully establish throughout a basin that is deeper than 18 inches and is therefore not recommended; areas of saturated un-vegetated muddy bottoms are likely to occur. The number of plants that can tolerate both dry conditions and regularly ponded water to a depth greater than 18" in Minnesota is limited and most of those are shrubs or trees.
10. Seeding dates do not match the MN DOT spec for seed mixes beginning with the # 3 (native seed mixes). The dates do not match in the MN DOT spec book.
    Protective buffer signage in accordance with 152.57 (f) shall be provided and shown on the plans. The upland boundary line of the buffer zone shall be identified by permanent markers, which have been approved by the city, at each lot line, and one at every 50-foot interval.